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ABSTRACT

Health professions education represents one of the South's major successes, but because of the implications of a larger supply of health professionals and the increasing costs of both health care services and the education of health professionals, it also represents one of the major challenges before state policymakers. State policymakers will be facing three major problems in the coming years: a possible oversupply of health professionals; rapidly increasing costs of health care services; and continuing problems of getting personnel to geographic areas, subspecialties, and practice settings that need them. Six strategies are suggested to solve these problems; (1) create new health professions education programs only where there is clear and compelling evidence of need that cannot be met otherwise; (2) implement coordinated strategies to address the specific problem of distribution; (3) make maximum use of existing programs through interinstitutional and interstate agreements; (4) cut back on class sizes and close some training programs; (5) raise tuition for students in those professions that are expected to be surplus; and (6) develop the capacity to analyze the financing and costing of health professions education. It is essential that each state know the current status of its own health professions training programs within its health care delivery system. Only after analysis of the state's trends and needs can rational action be taken to implement specific strategies. (KC)

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Health Professionals for the South:

Supply and Cost Issues Needing State Attention

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SREB

Southern Regional Education Board

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Introduction

Health professions education represents one of the South's major successes, but because of the implications of (a) a larger supply of health professionals and (b) the increasing costs both of health care services and the education of health professionals, it also represents one of the major challenges before state policymakers. Since 1960 the South has increased the number of programs that prepare the various health professionals to the point that the region is now producing twice as many practitioners as it did at that time. The pipelines for preparing dentists, veterinarians, pharmacists, and physicians are full, which means that these large numbers of new graduates will continue through the 1980s.

In addition, the South is now attracting practitioners from other regions of the country and students who have gone abroad to study. And, new programs have been established so that graduates no longer have to leave the region to receive specialty training. As a result, the region is gaining practitioners faster than the nation. While the South started from further behind, projections indicate that there will soon be more than an adequate supply of health professionals for the region as a whole.

Already there are signs of surpluses. Some dentists, for example, have found themselves facing bankruptcy after investing large sums in their education and in office equipment. Enrollments are declining in some of the professional schools, and there are fewer applicants in others. Practitioners in nursing and allied health sometimes seek work in other fields, such as sales, clerking, and real estate, because they are unable to find working conditions that are satisfactory to them.

State leaders are aware of the ever increasing costs of health care services and of health professions education. What hasn't been so readily

apparent is that as each newly graduated health professional goes forth to deliver services and become an entrepreneur in the delivery system, total public expenditures for health go up. There has been a vast expansion in the quality, quantity, and the technical complexity of the health care system--but at a very high cost both to government and to individuals. These expenditures are likely to increase, for there is almost unlimited potential for the health care system to improve its services.

Despite increases in the overall supply of health manpower, serious problems of distribution of professionals to geographic, subspecialty, and public service areas of need continue, except for those situations in which carefully coordinated strategies have been directed to specific problems. It seems clear that simply increasing further the number of professionals will do only a little to solve these problems, and may aggravate them, unless other more definite actions are taken. Solutions require sophisticated combinations of action by the health professions schools, higher education agencies, elected officials, third-party payers, licensing boards, and the professional societies. Single strategies have a poor record of success, but those states which have been able to mount concerted actions have been quite successful in influencing practitioners to locate in the areas where they are needed.

With all the changes in the manpower supply picture and the changes in federal funding for health professions education, it is essential that each state analyze carefully the whole range of health manpower trends and needs and modify its policies accordingly.

Growth in Health Professions in the South

The region once lagged badly in the supply of workers in virtually every health profession and occupation. But, through combined efforts of government and education, new schools and training programs have been created in most of the health professions and occupations, and enrollments have increased significantly in existing schools. The net result is that the region's output of new workers in the various health occupations has doubled, and in some cases tripled, since 1960. Most of the increase occurred in the expansionary days of the 1960s and 1970s, but the magnitude and the long-term effects of this expansion present a new set of issues for the 1980s and 1990s. Some examples of the growth:

Seven new dental schools have been created since 1957, and first-year enrollments have grown from 807 to 1,611.

Basic nurse education programs have grown from 305 to 418, and total enrollments have increased from 23,360 to 65,408.

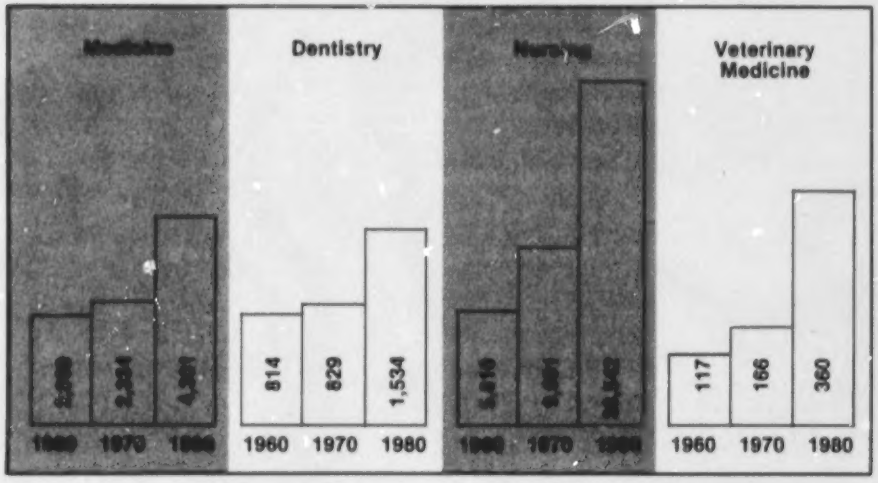
The number of medical schools has increased by 15 since 1960, and first-year enrollments have increased from 2,350 to 5,046.

Southern states have established four of the nation's five new schools of veterinary medicine, and total enrollments have more than tripled, from 735 to 2,327 between 1960 and 1980.

Comparable growth has taken place in allied health, pharmacy, osteopathic medicine, optometry, and public health. For most of the major health professions, the training period stretches from four to nine years. Students already in those pipelines guarantee the region a continuing increase of new graduates throughout the remainder of the 1980s. For example, in 1970 the South graduated 2,334 physicians; by 1980 the number had grown to 4,301. From 1985 and on, graduates will number 4,725 per year if no changes are made. At that time, the region will be producing as many physicians every 10 years as it did each 25

years. Figure 1 indicates how rapidly the annual production of graduates has grown in four health professions.

Figure 1
Graduates of Selected Health Professions Schools in the South
1960, 1970, 1980



SOURCE: Compiled from SREB files.

State policymakers and those responsible for the education of health professionals will be facing three major problems in the coming years:

Possible oversupply of health professionals;

Rapidly increasing costs of health care services and education; and

Continuing problems of getting manpower to geographic areas, subspecialties, and practice settings that need them.

There are complex issues surrounding each of these problems. The reader is asked to keep in mind that although many of the following examples relate to the medical profession for which more data are available, these issues are faced in varying degrees in all of the health professions.

Oversupply

Several studies, such as that of the Graduate Medical Education National Advisory Committee, predict that the nation and the South will have a far more than adequate supply of physicians in the years ahead. A study in South Carolina predicts a surplus of several hundred by 1990. And another in Florida, which shows that the number of physicians there increased by 133 percent between 1970 and 1980, forecasts that the growth will continue to outstrip the growth of the population. The federal government has discontinued its enrollment-based general support program to health professions schools because of the national evidence of a more than adequate supply of health professionals.

There are four important factors leading to the emerging oversupply of health professionals in the South:

1. *The South has increased the number of trainees to a greater extent than the rest of the nation.*

Increases in enrollments from adding new schools and increasing class sizes have been much greater in the South than in the rest of the nation. Typical of what has occurred in most health professions is the 86 percent increase in dental graduates between 1970 and 1980, compared to a 48 percent increase in the United States as a whole. The 84 percent increase in medical graduates in the South between 1970 and 1979 was the highest for any region in the nation. In many of the professions the increase in new graduates has not yet peaked, since some of the newer schools have not reached the planned capacity.

These higher rates of production will continue into the 1990s because students entering dental and medical schools in 1983 will not be ready to practice until 1990.

Manpower projections for the future reflect this accelerated production of new professionals. In 1970, the South had 112 physicians per 100,000 population, compared to the national average of 137 physicians per 100,000 population. By 1980, the United States average had risen to 184 per 100,000, with 159 per 100,000 in the South—well above

the 150 per 100,000 population figure that the World Health Organization and the national government of Canada have defined as the level of adequacy. Between 1980 and 2000, the South will nearly double the current number of practicing physicians.

2. *The South has increased training opportunities so that young graduates do not have to leave the region in order to specialize.*

In 1970, significant numbers of young physicians and other health professionals left the region to take specialty training unavailable in the South. Many never returned. States have made determined efforts to change this situation. Thus, the number of physicians who take specialty training in the South has increased by nearly two-thirds, compared to a one-quarter increase elsewhere. And, because there are now numerous master's and doctoral degree programs in nursing, nurses no longer need to leave the region for graduate education.

3. *Many foreign-trained health practitioners have located in the South.*

During the 1970s, large numbers of foreign-trained physicians and nurses entered the United States—some came for specialty training; others came to take positions in public hospitals which could not attract American-trained graduates. During an eight-year period in the 1970s, the number of foreign-trained physicians located in the region increased by 87 percent, compared to only 31 percent in the rest of the nation.

A change in the federal law has substantially closed the door for foreign national physicians to come to the United States. However, an increasing number of American students who are now enrolled in foreign medical schools, especially schools in Latin America and in the Caribbean, plan to return to the United States to practice. Many of these young graduates will locate in the South.

4. *There has been a disproportionate in-migration of health practitioners from other parts of the United States.*

The growth reputation of the "Sunbelt South" continues to attract

physicians, dentists, nurses, and other health professionals in numbers disproportionate to the overall migration to the South. In a four-year period in the mid-1970s, 2,033 physicians came to the South from other parts of the country, while only 318 left the region—a net gain of 1,715. At that rate, the increase in physicians from other parts of the nation is equal to the graduates of four medium-sized medical schools. This trend has been accelerating in recent years, according to the licensure boards in several states.

Doesn't the Sunbelt's growth mean that we will need more health professionals? Yes, the increasing population, and especially the increasing number of older persons who have significantly greater health care needs, necessitates an increase, but not more than the South is now producing, and probably less, because of in-migration.

Projections of a more than adequate supply of health professionals are for total numbers of practitioners within the states of the region. There is still, and will continue to be, uneven distribution unless strategies are implemented to actively influence the kinds of locations, settings, and types of practice that the new practitioners choose. The problem of distribution is one of the major challenges before state policymakers and the health professions schools today.

Somewhat offsetting the trends toward oversupply are declining enrollments in some fields. Dental schools and veterinary medicine schools report declines in the number of applicants, and a few schools now have vacancies for which they have been unable to recruit qualified applicants. Even medical schools have experienced declines in the number of applicants. At one time there were 3.5 qualified applicants for every first-year vacancy in medical schools. Now there are just over two applicants for each position, and some state medical schools have experienced difficulty in recruiting sufficient numbers of qualified candidates from among their own state residents to fill mandated state quotas.

Nursing presents a special case. There have been great increases in the numbers of nurses trained since 1960, but there has also been substantial growth in the numbers of institutions and agencies which

employ nurses. Various formulas are applied to estimate the need and demand for nurses, but regardless of the method used, there does not appear to be an impending oversupply of nurses. In fact, the declining enrollments in nursing schools make it likely that some shortages will continue, and there is serious need to address the special problems of recruiting and retaining of nurses in 24-hour care settings such as hospitals and nursing homes.

Much of the recent decline in applicants for the health professions schools can be attributed to the termination of federal loan and scholarship programs at a time when tuitions and general college expenses have been growing. Some of the decline in applicants in nursing and allied health may be attributed to more attractive options in other career lines — especially for women. Also, students have become more aware of impending surpluses and many are reluctant to assume debt burdens for health education in the face of such career uncertainties.

Costs

There are two aspects of the increasing costs of educating larger numbers of health professionals: (1) costs of health care services and (2) costs of the education itself.

1. Health care costs

Health care costs to consumers through direct fees, health insurance, and other third-party payers will surely rise in response to the increase in the number of providers. For example, it has been estimated that each physician may generate $250,000 in health care expenditures each year. Assuming that a physician practices 35 years, the cost to "the public" during that time comes to $8.75 million. While these are estimates, which may prove to be somewhat high or low, it is clear that the increased costs of health care will be significant.

To date, the additional practitioners have found employment and ways to be adequately compensated. Several observers have noted that the number of physicians' services expands with the number of physicians in a community, rather than following the classic economic

principles of supply and demand. This is largely because additional specialists conduct more technological confirmatory and diagnostic tests, more consultations, and more sophisticated therapeutic procedures to increase the quality of care provided to the population. All of these extra services (which include additional allied health workers, nurses, etc.) also cost more.

The same kind of increased generation of health services is likely for dentists, veterinarians, and certain other professionals, although to a lesser amount. Public pressure for cost containment might lead to a slight moderation in the overall increases of health care costs, but no one forsees actual reductions. And, in one way or another, all of these expanded costs will be paid by "the public." State government can expect continued expansion of costs for (1) the clinical aspects of health professions education, (2) services that the state provides directly, for example, public and mental health, and (3) services which it reimburses, for example, Medicaid. In addition, states can expect their industries to be concerned about rising costs of health insurance and their citizens to be irate about the growing deductibles and services that will be excluded from reimbursements, which they must pay out of pocket.

In recent years health professionals and health agencies have undertaken special programs to increase their markets and revenues. Much of their success appears to come from expansion into kinds of services that are oriented more toward elective procedures, such as cosmetic surgery and counseling, than to care of the more seriously ill, but the costs to the society are real nevertheless.

The health sector of the economy has been commanding a steadily increasing share of the national income, accounting for 5 percent of the Gross National Product in 1960, 7 percent in 1970, and 10 percent in 1980. Health care expenditures continue to be the most rapidly inflating segment of the economy, despite efforts to hold down costs. The federal government is grappling to control costs of the Medicare and Medicaid programs, while state governments have seen health care outlays increase at an annual average rate of 13 percent since 1970, largely as a result of Medicaid costs. And, health insurance

premiums have risen to the point where auto manufacturers find that this single employee benefit costs more than the steel in their automobiles.

Several national and state administrations have made attempts to control health care costs, but with only limited success. Efforts continue to focus on health promotion and prevention, and numbers of "new" health care arrangements, such as health maintenance organizations, outpatient surgical clinics, and hospices, have been initiated to compete with existing hospitals and medical groups to provide services at lower costs. However, many of these are likely to become additional, rather than alternate, providers, if the educational system continues to turn out large numbers of professionals seeking to become entrepreneurs in the health care system.

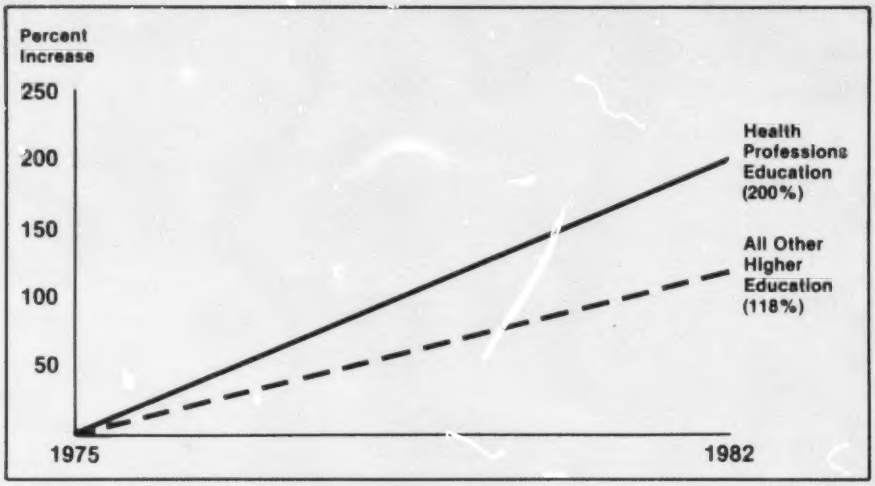
In addition, the links between the health professions schools and the health delivery system are more direct than in most industries. Medical schools, for example, employ clinical practitioners as faculty persons and must provide opportunities for incomes that are commensurate with those of private practitioners. Thus, the costs of the educational system are closely tied to the inflationary costs of the industry as a whole.

2. Cost of health professions education

The Health Policy Research Group at Georgetown University estimated that in 1977 $2 billion was spent for health professions schools in the South. Not all of this was state tax dollars. And, not all of it went for education of students—some went for research and service programs operated by the schools. But this figure gives some idea of the magnitude of the health education system. In 1975 the SREB states appropriated about $440 million in state tax dollars for health professions training; by 1982 the figure was approximately $1.25 billion—a rate of increase that was almost twice as great as that for other higher education (see Figure 2). This accounts for 20 percent of the total state higher education appropriation. Nearly two-thirds of the

state support is spent on the various aspects of medical education (undergraduate, specialty training, and education for biomedical scientists).

Figure 2
Percent Increases in State Appropriations
SREB States, 1975 to 1982



SOURCE: 1975 health professions funding from Health Policy Research Group, Georgetown University School of Medicine; generally comparable to 1982 data from SREB-State Data Exchange.

The education of health practitioners is expensive primarily because of the technology and the clinical settings and supervision required. Thus, the fact that health care costs in general are the most rapidly increasing sector of our national economy is reflected in the costs of the academic health science centers, making health education the most rapidly increasing sector of higher education. In fact, it is growing at almost double the rate for the rest of higher education. Tennessee found that the portion of the state's entire higher education budget that was devoted to publicly supported medical education rose from 7.7 percent to 12.4 percent between 1973 and 1978. Since that time, the Veterans' Administration has sharply reduced its funding for the

state's newest medical school, so Tennessee's share has increased. In Texas, the increase in state appropriations for the state's six health education centers in 1981-83 nearly equaled the increase in appropriations for all the other 33 public institutions of higher education. Health professions funding increased 42 percent over the previous two years, compared to a 24 percent increase for the rest of higher education.

Why should health professions education costs be of concern to state governments? Simply stated, because the education of health professionals is so expensive, and because states are having to pay a larger share of the increasing costs. In addition, the long-range costs of "surplus" health manpower to state governments and to the citizens of the states are staggering. In recent years, more of the costs of educating health practitioners have shifted to state governments. As recently as 1965, state support was 20 percent; by 1980, this had increased to 35 percent. Several factors have contributed to this increase:

Declining federal support for health professions education. In 1973 the federal government offered medical schools $2,015 per student in capitation funds; by 1981, these funds were gone. The federal government also has ended the grant programs which were initially designed to stimulate enrollments in the other health professions.

Withdrawal of federal support for special training and service programs operated by academic health centers. These special programs included educational programs, university-affiliated facilities for the mentally retarded, and family planning clinics.

Declining federal support for research. Total federal research funds have declined only slightly, but inflation has reduced their value. In addition, research dollars tend to be concentrated in the well-established, highly specialized health centers, rather than in the newer health professions education programs that concentrate on training practitioners for primary care.

Withdrawal of Veterans' Administration support for health professions education. In the 1970s the Veterans' Administration offered

support for the development of several new state medical schools, four of which are in the South. That support ends in 1983.

The decision to transfer many health education programs from hospitals supported by patients or by city-county governments to colleges or universities supported by the states. Formerly, hospitals operated diploma schools of nursing and training programs for numbers of allied health workers. Most of these programs have been transferred to higher education.

The decisions of states to create additional training programs in the health professions.

Decisions to limit payments under Medicaid, Medicare, and health insurance programs to patient care costs only, as part of overall hospital costs containment.

Decreases in federal student loan and stipend programs. While these cutbacks have not directly added to state costs, they are responsible for higher per student costs when there is a decline in enrollments in health professions schools. Many students must support themselves *and* pay the increasing tuition and fees required for their education. The interest rates on regular commercial loans have been prohibitive, so many have turned to other careers. There has been a marked decline in minority applicants and in those from low-income families.

The financing and the costs of educating health professionals are complex. The funding for the academic health centers comes from several sources in addition to state government—student tuition and fees, federal research grants, patient fees, gifts and endowments, and contracts with other public and private agencies. On the cost side, the money goes to a complicated array of professional and graduate education, research, patient service, and community service. Because of the complexity, and because a relatively low proportion of the funding has come from state governments, most states have given little attention to the study of the costs of health professions education.

Distribution

The region continues to have an uneven distribution of health manpower. Practitioners have not chosen to work in the practice settings, subspecialties, and geographic areas in which they are needed. In fact, shortages in certain geographic and specialty areas—especially in rural locations and in the primary care specialties—have created much of the pressure to establish new health professions schools.

If the South has more than doubled the number of health care practitioners, why do we continue to have problems with distribution? The problems of distribution lie in four areas:

1. Geographic—rural and inner-city areas

In recent years, the greatly expanded supply of health professionals has brought modest increases in the numbers who practice in smaller communities, but there have been far greater increases in the numbers locating in urban/suburban areas. In the South in the 1970s, the 38 percent rate of increase in the number of active, nonfederal physicians per 100,000 population in urban counties was more than double the 16 percent rate of increase in rural counties.

However, even in the metropolitan areas, health practitioners have located in the prestigious health centers and in the affluent suburbs, while the inner cities have lost practitioners. The payment systems which depend on fees of affluent patients and patients with high levels of insurance coverage have been largely responsible for this trend. Persons in rural communities and inner-city residents are likely to be less affluent or on Medicaid, so practitioners are unable to earn as much income in these areas. In some locations there are so few people that they never will be able to support the health practitioners they need, but the overall problem of geographic distribution will require other approaches than simply increasing the total supply of health professionals.

2. Specialization

The tendency for health professionals to choose to work in highly technical specialties rather than in the needed primary care fields,

which are the first line of care for the population, is another problem. In medicine, specialization has overshadowed family medicine and general practice. Veterinarians choose small animal practice, rather than large animal practice—the food- and fiber-producing animals on which our agricultural economy depends. Podiatrists elect to concentrate on surgical procedures, rather than providing general foot care. And so it goes. The technical specialities pay better, but they require the support systems of large hospitals and clinics that are found primarily in urban areas. However, the need of our society is for more persons to provide first-line or primary care.

During the period from 1970 to 1978, the South experienced a 2.5 percent decline in the number of practitioners in the primary medical care specialties. This trend is expected to turn to modest increases as the graduates of recently established state-supported primary care residency training programs complete their training and enter practice. However, it has required the specific strategy of state support for training in primary care to interrupt the natural trend for new practitioners to seek the better paid and more prestigious specialties.

3. Minority practitioners

The South also has an inadequate proportion of black practitioners. The population of the South is 19 percent black, but this proportion of black health workers is reached only in cases of a few institutional care workers, such as nurse aides and orderlies. In the major professions, the percentages are substantially lower—2.5 percent for physicians, 3.5 percent for dentists, and 7.5 percent for registered nurses. Few would suggest the black persons should be treated only by black practitioners, but there is no doubt that larger numbers of black practitioners in the delivery system influence the adequacy of health care for the black population. It is obvious that simply increasing the numbers, without regard to the special selection and retention of minority students, will not solve the shortage of minority practitioners.

4. Public and institutional services

The region is also experiencing difficulty in recruiting and retaining health workers in public and institutional services. Despite the overall

increase of health practitioners, there has been a decline in the number who choose to work in services such as public health programs, public mental institutions, nursing homes, and public general hospitals. These programs are viewed as less desirable places to work because patients are often more disabled and less able to cooperate than is the case in independent practice or in private institutions and agencies. In addition, salaries are low and administrative policies are rigid. The shortages in these public and institutional areas sometimes have been drastic enough to require hospitals to discontinue certain services. Until these matters are addressed, increasing the supply of health practitioners is not likely to solve the problems of attracting personnel to these settings.

The factors that influence a health practitioner to work in any particular specialty or work setting are a complex combination of the way in which the practitioner is trained and the incentives or disincentives provided by the society after graduation. However, studies have shown that the influences and values instilled during the training years are more potent factors than those incentives which prevail after graduation. Thus, while public policymakers should give attention to those influences that act during the training years *and* to those that have their impact on the delivery system, it is especially desirable that the public institutions responsible for the education of health professionals give special attention to applicants who are likely to be influenced to practice in ways that best meet the public needs. Too often, faculties are committed to a scientist/specialist image of the professions rather than to a practitioner/generalist concept that better meets the public needs. The society needs a balance of the two.

Strategies for States

There are three reasons for a state to support the education of health professionals:

To help assure an adequate supply of health providers for the state's needs;

To help assure that health providers are available to address particular problems, such as rural care, specialty care, care in the public services, and services to minorities within the state; and

To offer opportunities for its citizens who want to pursue health careers.

At this time, the states of the South have satisfactorily addressed the issues of basic supply and opportunity, but major attention is needed to address the problems of distribution. In view of the more than adequate supply of health manpower and the increasing costs to state government, and to society in general, the states should consider strategies for early action.

What are the options for the states, given the health manpower and financial situations?

1. *Create new health professions education programs only where there is clear and compelling evidence of need that cannot be met otherwise.*

At this time, states of the South should be very cautious about starting any new health professions education programs. The region now has an adequate number of training programs for practically all of the professions.

States should be especially concerned about the development of new programs at advanced academic levels that are designed to raise the entry-level requirements for the profession. There have been pressures of this kind from several professions, such as physical therapy and pharmacy. Not only are these training programs costly, but they also produce practitioners who expect higher salaries and fees because of their advanced degrees.

2. *Implement coordinated strategies to address the specific problems of distribution.*

The uneven distribution of graduates to geographic areas and to specialties and practice settings in which they are needed is not likely to be altered very significantly by simply producing more health

professionals. States can make better use of their limited dollars by instituting carefully coordinated activities to influence students to choose to locate in the areas of need.

One approach is to institute loan forgiveness programs with substantial loans and heavy buy-out penalties; however, the experience of several states has shown mixed results. When loan forgiveness programs have been instituted without any other strategies, the results have been dismal. But when they have been combined with other efforts, such as careful selection of candidates who are motivated to work in the areas of need, specially designed teaching experiences, and counseling and placement services, they have been quite successful. Programs in North Carolina, Arkansas, and Maryland are but three examples of successful efforts in the region.

Under North Carolina's Health Manpower Plan, the combined efforts of the professional schools, the nine Area Health Education Centers, the community hospitals, and the Office of Rural Health Services have raised the state—the nation's fourth most rural state—to the top in the number of physicians and other health practitioners per 100,000 population in rural counties.

Arkansas has implemented a similar plan with several combined actions, including loan programs, Area Health Education Centers, rural preceptorships, an Office of Community Medical Relations, physician/community fairs, and family practice residency programs, which are placing 70 percent of family medicine graduates in Arkansas communities of less than 12,000 population. Most states can make improvements of this kind, although there will always be some geographic areas without practitioners, regardless of the total supply.

Other strategies must be applied to solve other distribution problems. The combined efforts of the Maryland Mental Hygiene Administration and the Department of Psychiatry at the University of Maryland have been successful in recruiting 61 new psychiatrists to the state's public mental health programs. The program includes careful selection and counseling, combined residency training between university and agency, location of faculty in the public agencies, liberal stipends, and careful attention to placement.

The problems of minority recruitment and retention are especially difficult, particularly for the major professions. The pool of qualified minority applicants is not large. Activities here must be directed to enlarging and strengthening the pool of applicants through intensive counseling and motivation, assistance to pre-professional programs in minority institutions, tutorial programs, and financial assistance to students. Efforts also must be continued to add minority persons to the faculties of the professional schools.

3. *Make maximum use of existing programs through interinstitutional and interstate agreements.*

Through mechanisms such as the interstate contract program of the Southern Regional Education Board, it now is possible to train virtually all the additional health professionals the South needs by making better use of the existing programs.

4. *Cut back on class sizes and close some training programs.*

States and schools should make some conscious decisions to limit enrollments, and some have already done so. The declines in enrollments in some of the allied health programs are forcing considerations of closing and consolidating programs that are too small to be cost efficient. It is likely that the larger major professional schools with a full range of specialists on the staff can provide basic education more efficiently than small schools. However, large schools must work harder to overcome the tendency to focus on the technological specialties rather than on primary care, rural care, and other settings in which health practitioners are most needed.

The issue of quality must be kept in mind in making cutbacks. Quality is particularly difficult to define in health professions education, but cutting back on class sizes should improve instruction. At the other extreme, programs may be too small to provide quality, and students would benefit from consolidation and sharing across state borders. In addition, cutting back on some of the programs that are not needed would allow funds to be transferred to maintain the quality of the ones that are left.

Cutbacks in class sizes should be planned so that there can be appropriate cuts in costs. Otherwise, it is likely that there will be either no change in costs or serious damage to the educational programs.

5. *Raise tuition for students in those professions that are expected to be in surplus.*

Tuition charges for health professions education in the public sector are far below the total costs to the state. If tuition charges were increased, the students would bear a larger share of the real costs of their education, but for the major professions the ultimate return on investment would still be very favorable.

A major disadvantage is that the applicants most likely to be discouraged by higher tuitions are those from low-income families that have already been hit by the declining federal grants and loans. States should establish or increase loan forgiveness programs as they raise tuitions.

6. *Develop the capacity to analyze the financing and costing of health professions education.*

State governments should support the efforts of their higher education agencies to analyze and deal with the complexities of the financing and costing of health professions education in academic health centers. This is essential as the portion of state financing continues to increase.

Conclusion

These are some of the strategies that the states of the South might undertake to address the issues of the more than adequate production of health practitioners, the increasing costs of health professions education and health care services, and distribution concerns. However, the issues vary in the different states, as earlier studies and recommendations by state higher education agencies have shown. It is essential that each state know the current state of affairs within its own health professions training programs and within its health care delivery programs. Only after analysis of the state's trends and needs

can rational action be taken to implement specific strategies. Analysis of the state's situation should involve representatives from the professional schools, the health delivery system, elected officials, and higher education agencies. All parties stand to gain from such action studies:

Health professions educators can improve the quality and relevance of their training to better meet the state's needs.

Health delivery agencies can be better assured of the supply of manpower and special competencies needed for their patients.

Third-party payers can feel that their payments are better directed to needed patient care services.

Higher education agencies can keep health professions programs and costs in reasonable balance with the rest of the system.

Legislators can see that the taxpayers' money is spent wisely and meets the needs of all subgroups of the population.

Health professionals can participate in helping provide adequate health services to all sectors of the state, and thus improve the public image of the professions.

The specific actions will vary from state to state, but ignoring the issues of health professions education will be costly for any state. Continuing a laissez-faire course is almost certain to result in even higher costs, both for health professions education and for overall health care services, without significantly affecting the problems of distribution. The taxpayers' money can and should be better directed in this rapidly expanding area of state responsibility.